Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Yelahanka Division

Name of Work: Improvements to Roads And Drains at 2nd ,3rd 4th and 5th 6th 7th main roads at Judicial Layout in ward no.04

					Estimate Cost Rs.			100.00 Lakhs
Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Removing & Refixing Stone Slabs of drains and Pointing in C.M(1:3). (Page No 25., I.No.5.33 of KPWD [illegible])								
[illegible]	76.00							
[illegible]	8.36							
[illegible]	84.36							
[illegible]	5.06							
[illegible]	89.42							
[illegible]								
	2	142.00	1.00		284.00			
	2	105.00	1.00		210.00			
	2	128.00	1.00		256.00			
	2	100.00	1.00		200.00			
	2	88.00	1.00		176.00			
	2	116.00	1.00		232.00			
	2	266.00	1.00		532.00			
	2	145.00	1.00		290.00			
	2	68.00	1.00		136.00			
	2	125.00	1.00		250.00			
	2	65.00	1.00		130.00			
	2	65.00	1.00		130.00			
	2	65.00	1.00		130.00			
	2	160.00	1.00		320.00			
	2	103.00	1.00		206.00			
[illegible]								
	2	142.00	1.65		468.60			
	2	105.00	1.65		346.50			
	2	128.00	1.65		422.40			
	2	100.00	1.65		330.00			
	2	88.00	1.65		290.40			
	2	116.00	1.65		382.80			
	2	266.00	1.65		877.80			
	2	145.00	1.65		478.50			
	2	68.00	1.65		224.40			
	2	125.00	1.65		412.50			
	2	65.00	1.65		214.50			
	2	65.00	1.65		214.50			
	2	65.00	1.65		214.50			
	2	160.00	1.65		528.00			
	2	103.00	1.65		339.90			
Total Qty					**9227.30**			
Consider 30% of total Qty					**2768.19**			
					2768.19	**Sqm**	**89.42**	**247535.98**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data rate								
Basic rate	2100.00							
5% of Totall qty of Item no -1 of precast slab					104.46			
					104.46	**Sqm**	**2100.00**	**219366.00**
providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including curing etc., complete. 7.5cm thick (Page No 25., I.No.5.31.1 of KPWD S.R 2016-17).								
Basic rate	628.00							
10% AD-HOC	69.08							
Sub Totall-1	697.08							
6% LWW	41.82							
Sub Totall-2	738.90							
Consider 10% of Total qty of Item no -1					922.73			
					922.73	**Sqm**	**738.90**	**681809.63**
3000-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. 3000TH / Chapter 3 (Page No142., I.No.19.1 of KPWD S.R 2016-17).								
Basic rate	82.00							
10% AD-HOC	9.02							
Sub Totall-1	91.02							
6% LWW	5.46							
Sub Totall-2	96.48							
Taken lift & lt, transport	100.00							
Sub Totall-3	196.48							
	2	142.00	0.50	0.50	71.00			
	2	105.00	0.50	0.50	52.50			
	2	128.00	0.50	0.50	64.00			
	2	100.00	0.50	0.50	50.00			
	2	88.00	0.50	0.50	44.00			
	2	116.00	0.50	0.50	58.00			
	2	266.00	0.50	0.50	133.00			
	2	145.00	0.50	0.50	72.50			
	2	68.00	0.50	0.50	34.00			
	2	125.00	0.50	0.50	62.50			
	2	65.00	0.50	0.50	32.50			
	2	65.00	0.50	0.50	32.50			
	2	65.00	0.50	0.50	32.50			
	2	160.00	0.50	0.50	80.00			
	2	103.00	0.50	0.50	51.50			
Cut portion								
	1	142.00	1.00	0.40	56.80			
	1	105.00	1.00	0.40	42.00			
	1	128.00	1.00	0.40	51.20			
	1	100.00	1.00	0.40	40.00			
	1	88.00	1.00	0.40	35.20			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Road -5	1	116.00	1.00	0.40	46.40			
	1	266.00	1.00	0.40	106.40			
	1	145.00	1.00	0.40	58.00			
	1	68.00	1.00	0.40	27.20			
	1	125.00	1.00	0.40	50.00			
	1	65.00	1.00	0.40	26.00			
	1	65.00	1.00	0.40	26.00			
	1	65.00	1.00	0.40	26.00			
	1	160.00	1.00	0.40	64.00			
	1	103.00	1.00	0.40	41.20			
Manholes	7	15.00	6.00	0.40	252.00			
Culvert	2	8.00	1.50	1.20	28.80			
					1847.70	**Cum**	**196.48**	**363038.31**
KBS 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 330kgs. with 40mm and down size graded granite metal coarse aggregates @ 0.892cum and fine aggregates @ 0.465cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No.KBS 4.1, 4.2 (P.12/I.4.2)/ PWD SR 2016-17								
Basic rate	5046.00							
10% AD-HOC	555.06							
Sub Total-1	5601.06							
6% LAW	336.06							
Sub Total-2	5937.12							
Culvert	2	8.00	1.50	0.15	3.60			
					3.60	**Cum**	**5937.12**	**21,373.64**
KBS 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 (P.23/I.5.9)/ PWD SR 2016-17								
Basic rate	5005.00							
10% AD-HOC	550.55							
Sub Total-1	5555.55							
6% LAW	333.33							
Sub Total-2	5888.88							
Culvert	4	8.00	0.45	0.70	10.08			
					10.08	**Cum**	**5888.88**	**59,359.94**
KBS - 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 330kgs. with 20mm and down size graded granite metal coarse aggregates at 0.78cum and fine aggregates at 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms.thick, well compacted, in foundation, plinth and cills including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. (P.No.12, I.No.4.6 of PW, P&IWTD SR 2016-17)								
Basic rate	5441.00							
10% AD-HOC	598.51							
Sub Total-1	6039.51							
6% LAW	362.37							
Sub Total-2	6401.88							
Culvert	4	8.00	0.45	0.10	1.44			
					1.44	**Cum**	**6401.88**	**9,218.71**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Providing precast slab of 250 mm thick including cost of all materials, labour, carriage,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge-(Extra rate)								
Main rate	5111.00							
	2	8.00	1.50		24.00			
					24.00	**Sqm**	**5111.00**	**122664.00**
400/1 W400-6.1. Construction of granular sub-base by providing close graded material, crushed stone aggregates of granite/trap/basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. a) Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material (Page No 155., I.No.20.4.2 of KPWD S.R 2016-17).								
Main rate	1571.00							
ECRB,AD+HOC	172.81							
Sub Total-1	1743.81							
6%GST	104.63							
Sub Total-2	1848.44							
Add/Cut portion								
Cross road -3	1	142.00	1.00	0.15	21.30			
Cross road -4	1	105.00	1.00	0.15	15.75			
	1	128.00	1.00	0.15	19.20			
	1	100.00	1.00	0.15	15.00			
	1	88.00	1.00	0.15	13.20			
	1	116.00	1.00	0.15	17.40			
	1	266.00	1.00	0.15	39.90			
	1	145.00	1.00	0.15	21.75			
	1	68.00	1.00	0.15	10.20			
	1	125.00	1.00	0.15	18.75			
	1	65.00	1.00	0.15	9.75			
	1	65.00	1.00	0.15	9.75			
Cross road -3	1	65.00	1.00	0.15	9.75			
Cross road -4	1	160.00	1.00	0.15	24.00			
Side drains	1	103.00	1.00	0.15	15.45			
Sub marches	7	15.00	6.00	0.15	94.50			
					355.65	**Cum**	**1848.44**	**657397.19**
400/2 W400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting crushed stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (Page No.158 I.No.20.18)								
Main rate	1668.00							
ECRB,AD+HOC	183.48							
Sub Total-1	1851.48							
6%GST	111.09							
Sub Total-2	1962.57							
Add/Cut portion								
	1	142.00	1.00	0.225	31.95			
	1	105.00	1.00	0.225	23.63			
	1	128.00	1.00	0.225	28.80			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	1	100.00	1.00	0.225	22.50			
	1	88.00	1.00	0.225	19.80			
	1	116.00	1.00	0.225	26.10			
	1	266.00	1.00	0.225	59.85			
	1	145.00	1.00	0.225	32.63			
	1	68.00	1.00	0.225	15.30			
	1	125.00	1.00	0.225	28.13			
	1	65.00	1.00	0.225	14.63			
	1	65.00	1.00	0.225	14.63			
	1	65.00	1.00	0.225	14.63			
road -4	1	160.00	1.00	0.225	36.00			
	1	103.00	1.00	0.225	23.18			
	7	15.00	6.00	0.225	141.75			
					533.48	**Cum**	**1962.57**	**1046981.39**
and applying primer coat with ss bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using means complete as per specifications. MORTH Specification No.502 (P.No.160/It No.21.6)								
	26.00							
	2.86							
	28.86							
	1.73							
	30.59							
portion								
	1	142.00	1.00		142.00			
	1	105.00	1.00		105.00			
	1	128.00	1.00		128.00			
	1	100.00	1.00		100.00			
	1	88.00	1.00		88.00			
road -5	1	116.00	1.00		116.00			
Sharada nagar	1	266.00	1.00		266.00			
	1	145.00	1.00		145.00			
	1	68.00	1.00		68.00			
	1	125.00	1.00		125.00			
	1	65.00	1.00		65.00			
	1	65.00	1.00		65.00			
	1	65.00	1.00		65.00			
	1	160.00	1.00		160.00			
	1	103.00	1.00		103.00			
	7	15.00	6.00		630.00			
correction								
	1	142.00	2.50		355.00			
	1	105.00	2.50		262.50			
	1	128.00	2.50		320.00			
	1	100.00	2.50		250.00			
	1	88.00	2.50		220.00			
	1	116.00	2.50		290.00			
	1	266.00	2.50		665.00			
	1	145.00	2.50		362.50			
	1	68.00	2.50		170.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	1	125.00	2.20		275.00			
	1	65.00	2.40		156.00			
	1	65.00	2.50		162.50			
	1	65.00	2.10		136.50			
	1	160.00	2.60		416.00			
	1	103.00	2.00		206.00			
					6618.00	**Sqm**	**30.59**	**202455.21**
MS00- 15. Providing, laying dense graded bituminous macadam using 40/60 TPH capacity with Mechanical paver Gr-II (50mm to 75mm), crushed aggregates of specified grading with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications MORTH Specification No.507 (P.No.162&163 It.No.21.17.6)								
	6717.00							
	738.87							
	7455.87							
	447.35							
	7903.22							
	1	142.00	1.00	0.05	7.10			
	1	105.00	1.00	0.05	5.25			
	1	128.00	1.00	0.05	6.40			
	1	100.00	1.00	0.05	5.00			
	1	88.00	1.00	0.05	4.40			
	1	116.00	1.00	0.05	5.80			
	1	266.00	1.00	0.05	13.30			
	1	145.00	1.00	0.05	7.25			
	1	68.00	1.00	0.05	3.40			
	1	125.00	1.00	0.05	6.25			
road -1	1	65.00	1.00	0.05	3.25			
road -2	1	65.00	1.00	0.05	3.25			
road -3	1	65.00	1.00	0.05	3.25			
road -4	1	160.00	1.00	0.05	8.00			
	1	103.00	1.00	0.05	5.15			
aches	7	15.00	6.00	0.05	31.50			
correction								
	1	142.00	2.25	0.05	15.98			
	1	105.00	2.25	0.05	11.81			
	1	128.00	2.25	0.05	14.40			
	1	100.00	2.25	0.05	11.25			
	1	88.00	2.25	0.05	9.90			
	1	116.00	2.25	0.05	13.05			
	1	266.00	2.25	0.05	29.93			
	1	145.00	2.25	0.05	16.31			
	1	68.00	2.25	0.05	7.65			
	1	125.00	2.20	0.05	13.75			
	1	65.00	2.40	0.05	7.80			
	1	65.00	2.50	0.05	8.13			
	1	65.00	2.10	0.05	6.83			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	1	160.00	2.60	0.05	20.80			
	1	103.00	2.00	0.05	10.30			
					316.43	**Cum**	**7903.22**	**2500777.08**
5000-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with dust gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 (P.No.161 & I.No.21.2)								
Main rate	3.00							
10% Add for HOC	0.33							
Sub Total-1	3.33							
6% GST	0.20							
Sub Total-2	3.53							
	1	142.00	4.60		653.20			
	1	105.00	4.30		451.50			
	1	128.00	4.40		563.20			
	1	100.00	4.30		430.00			
	1	88.00	4.30		378.40			
	1	116.00	4.30		498.80			
	1	266.00	6.40		1702.40			
	1	145.00	6.00		870.00			
Extra	1	68.00	5.20		353.60			
Extra	1	125.00	4.15		518.75			
Extra road -1	1	65.00	4.70		305.50			
Extra road -2	1	65.00	4.60		299.00			
Extra road -3	1	65.00	4.70		305.50			
Extra road -4	1	160.00	4.70		752.00			
Extra	1	103.00	5.30		545.90			
					8627.75	**Sqm**	**3.53**	**30,454.23**
5000-7:Providing and applying tack coat with bitumen emulsion using 80/100 grade bitumen (VG30) on the prepared black toped suface at 2.5kg per 10 sqm, heating bitumen in boiler fitted with spray set (Excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per Specifications.(P.No.160 & I.No.21.7)								
Main rate	11.00							
10% Add for HOC	1.21							
Sub Total-1	12.21							
6% GST	0.73							
Sub Total-2	12.94							
	1	142.00	4.60		653.20			
	1	105.00	4.30		451.50			
	1	128.00	4.40		563.20			
	1	100.00	4.30		430.00			
	1	88.00	4.30		378.40			
	1	116.00	4.30		498.80			
	1	266.00	6.40		1702.40			
	1	145.00	6.00		870.00			
Extra	1	68.00	5.20		353.60			
Extra	1	125.00	4.15		518.75			
Extra road -1	1	65.00	4.70		305.50			
Extra road -2	1	65.00	4.60		299.00			
Extra road -3	1	65.00	4.70		305.50			
Extra road -4	1	160.00	4.70		752.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	1	103.00	5.30		545.90			
					8627.75	**Sqm**	**12.94**	**111665.52**
15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with paver Gr-II (30mm to 45mm), crushed aggregates of specified grading premixed with 5.4% grade bituminous binder and , transporting the hot mix to work site , laying to the required grade,rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired as per MORTH Specification clause No.500.9 complete in all respects complete as per MORTH Specification No.509 (P.No.164 Item No.21.22.6)								
	7659.00							
	842.49							
	8501.49							
	510.09							
	9011.58							
	1	142.00	4.60	0.04	26.13			
	1	105.00	4.30	0.04	18.06			
	1	128.00	4.40	0.04	22.53			
	1	100.00	4.30	0.04	17.20			
	1	88.00	4.30	0.04	15.14			
	1	116.00	4.30	0.04	19.95			
	1	266.00	6.40	0.04	68.10			
	1	145.00	6.00	0.04	34.80			
	1	68.00	5.20	0.04	14.14			
	1	125.00	4.15	0.04	20.75			
	1	65.00	4.70	0.04	12.22			
	1	65.00	4.60	0.04	11.96			
	1	65.00	4.70	0.04	12.22			
	1	160.00	4.70	0.04	30.08			
	1	103.00	5.30	0.04	21.84			
					345.11	**Cum**	**9011.58**	**3109986.17**
and fixing pre cast solid **cement concrete kerb stones** made out of CC 1:2:4 with top and width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 and finishing cutting including formwork, curing, including cost of materials, labour charges loading and unloading, lead and lift, transportation ete.,complete (P.No-25, I No-5.30)								
	313.00							
	34.43							
	347.43							
	20.85							
	368.28							
damaged	2	150.00			300.00			
				A	**300.00**			
				B	**667.00**	**Nos**	**368.28**	**245639.96**
Painting two coats after filling the surface with synthetic enamel paint in approved new plastered concrete surfaces, with materials, labour complete as per specifications. Chapter 8 (P.No-183, I No-24.1)								
	60.00							
	6.60							
	66.60							
	4.00							
	70.60							

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	2	200.00	0.35		140.00			
					140.00	**Sqm**	**70.60**	**9,883.44**
MB00-13: Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, No. 1974 (P.No.185 & I.No.24.15)								
Rate	512.00							
D-HOC	56.32							
Total-1	568.32							
	34.10							
Total-2	602.42							
	2	142.00	0.10		28.40			
	2	105.00	0.10		21.00			
	2	128.00	0.10		25.60			
	2	100.00	0.10		20.00			
	2	88.00	0.10		17.60			
	2	116.00	0.10		23.20			
	2	266.00	0.10		53.20			
	2	145.00	0.10		29.00			
	2	68.00	0.10		13.60			
	2	125.00	0.10		25.00			
	2	65.00	0.10		13.00			
	2	65.00	0.10		13.00			
	2	65.00	0.10		13.00			
	2	160.00	0.10		32.00			
	2	103.00	0.10		20.60			
					348.20	**Sqm**	**602.42**	**209762.37**
							Total Construction Cost	**9849368.77**
							DPR & PMC Charges	**150000.00**
							Sub Total	**9999368.77**
							Utility Shifting, Miscellaneous, Rounding off	**631.23**
							GRAND TOTAL	**10000000.00**

Certificate

The workspot was inspected and works is found to be necessary.

The area comes within the Bruhat Bangalore Mahanagara Palike limits.

The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017, issue rates and Data Rates.

Assistant Engineer

Asst. Executive Engineer,

Executive Engineer,
Yelahanka Division,
BBMP Bangalore
7/2/18

Administrative Approval

Accorded For Rs 100.00 Lacks

Head of A/C P-2415

CER NO :CB9/17-18 Dt:.. 08/02/2018

E.E. (Project)

Technical Sanction

Accorded For 100.00 lakhs only

Head of A/C P-2415

CER NO :640 Dtd 8/2/2018

TA

CE (YNK)